

## **TITLE OF INVENTION**

Emergency Mobile Sleep Units

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## **FIELD OF THE INVENTION**

## **BACKGROUND**

The invention involves a mobile sleeping unit, designed to provide temporary accommodations for large numbers of people. During emergency situations, it is often necessary to provide for displaced persons and for emergency workers. For example, during a large forest fire, it is necessary to bring in hundreds of firefighters and other emergency personnel. These persons may be on duty for many days, with little access to adequate shelter, food and sleeping facilities. In another example, after a hurricane or 15 tornado, there may be a large number of persons displaced from their homes. In addition, there will be Red Cross and other emergency aid people brought in to provide assistance. In many areas, there is simply not enough hotels or other accommodations available to house these people.

Currently, shelter during emergencies must be provided by hotels, tents or prefabricated buildings, constructed on-site. These have obvious disadvantages. Existing accommodations, such as hotels, may be nonexistent or too far away. Tents do not provide a significant shelter from weather or extreme temperatures. Prefabricated buildings, such as those disclosed in U.S. Patent No. 4,603,518, have been used. However, these types of structures are not very portable, and can be expensive to move 25 and set up. Other types of mobile accommodations are available, in the form of recreational vehicles, buses and campers. These types of systems have been described in the prior art, notably U.S. Patent Nos. 2,231,822, 4,759,582 and 6,017,080. However, these accommodations are not suitable to emergency use because they are typically for use by only a relatively few people, they may be expensive, and they are typically not 30 designed for off-road or heavy duty usage.

A better solution would be low cost housing which can be easily moved by truck, helicopter or other means, provides significant protection from weather, has heating and air conditioning, and provides kitchen facilities integrated with the sleeping facilities.

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### **SUMMARY OF THE INVENTION**

In one embodiment, the present invention is directed to a mobile sleeping unit with a vehicle chassis and body. The chassis includes a coupling device to attach to a towing vehicle and wheels to move the unit along roads. The body includes an access door, sleeping bunks, kitchen and storage facilities, lighting ventilation and electricity.

10 In another embodiment, the present invention is directed to a mobile sleeping unit in which the unit is constructed from a standard 28-foot tractor trailer.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

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FIG. 1 is a side view of one embodiment of the present invention, attached to a tractor trailer truck for transportation.

FIG. 2 is a cut view of the inside front portion of the embodiment shown in FIG. 1, showing the kitchen and storage facilities, and the air conditioning unit.

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FIG. 3 is a cut view of the inside side wall the of the embodiment shown in FIG. 1, showing the sleeping quarters.

FIG. 4 is a perspective view of the embodiment shown in FIG. 1

### **DETAILED DESCRIPTION**

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The present invention is directed to a mobile sleeping unit. In the embodiment shown on the figures, the invention utilizes readily available vehicles and equipment to create a unit that can be easily transported and set up in practically any location. The unit can be towed by a tractor trailer truck, or transported by rail or air to any location

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The side view of FIG. 1 shows a standard 28-foot tractor trailer attached to Class 7 tractor. In this embodiment, a standard tractor-trailer unit is modified to create the

mobile sleeping unit. The exterior modifications include an entrance door 100, an air conditioner 101, a generator 102, side windows 103 and roof ventilation/lighting units 104. The generator could be powered by gasoline and could be used to supply electricity for the air conditioning unit, power for electric heaters, power to the refrigerator and 5 cooking appliances and power for lighting. In addition, the generator can be used for recharging emergency equipment such as lights and radios, if the mobile sleeping unit is being utilized for emergency operations, such as a forest fire.

FIG. 2 shows the food storage/kitchen area of the embodiment shown in FIG 1. In this configuration, the storage/kitchen area is located along the front wall of the 10 interior of the tractor trailer. A variety of different configurations may be utilized for this area, but in the embodiment shown, the storage/kitchen area includes a refrigerator 105 and storage drawers 106 and a countertop 107. Also shown on FIG. 2 are overhead fluorescent lights 108, an air conditioning vent 109 and the entrance door 100. Other possible configurations for the storage/kitchen area could include water coolers, wall-hung storage cabinets, electrical outlets, microwave ovens, and other common food 15 preparation items.

FIG. 3 shows an interior side view of the embodiment shown in FIG 1. FIG. 3 shows one possible layout for the sleeping bunks. In this embodiment, the sleeping bunks 110 would be attached to the side wall of the unit, efficiently utilizing the available 20 space. The bunks are attached on one side to the trailer wall, and supported on the other side by cables 111 which attach to the trailer wall. The side of the bunk attached to the trailer wall is hinged, allowing the bunk to be lifted up and placed flat against the wall. This opens up the interior of the unit during daylight hours, allowing the unit to be used 25 as a changing area, command base, lunchroom or rest area. In a standard 28-foot tractor trailer, four columns of bunks could be placed along the wall, with up to three bunks in each column. The bunks can be placed along each side wall of the trailer, giving a total of 24 bunks. In the embodiment shown in FIG 3, one bunk on each side wall has been removed in order to allow for the addition of a small table 112. The table could be utilized for meals, meetings or as a place to review maps and drawings.

30 FIG. 4 shows a perspective view of the mobile sleeping unit, with roof being left off for reasons of clarity. This figure shows how the sleeping bunks 110 may be raised